

2 (Amended). The nucleic acid molecule of claim 1 wherein said polynucleotide has the complete nucleotide sequence of SEQ ID NO:

4.

A'
cont
3 (Amended). The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence of SEQ ID NO: 4 encoding the β -galactosidase II polypeptide having the amino acid sequence designated TBG4.

4 (Amended). The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence of SEQ ID NO: 4 encoding the mature polypeptide having the amino acid sequence from about 24 to about 724 in the amino acid sequence designated TBG4.

A₂
8 (Amended). The nucleic acid molecule of claim 1 wherein said polynucleotide has the complete nucleotide sequence of the cDNA sequence contained in Gen Bank Accession No. AF020390.

A₃
12 (Amended). An isolated nucleic acid molecule comprising a polynucleotide which hybridizes under stringent hybridization conditions to a polynucleotide having a nucleotide sequence identical to the nucleotide sequence in (a), (b), or (c) of claim

Q3
cont
1, wherein said polynucleotide which hybridizes does not hybridize under stringent hybridization conditions to a polynucleotide having a nucleotide sequence consisting of only A residues or of only T residues, and wherein stringent hybridization conditions are overnight incubation at 42°C in a solution comprising 50% formamide, 5 X SSC (150 mM NaCl, 15 mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5 X Denhardt's solution, 10% dextran sulfate and 20 µg/ml denatured, sheared salmon sperm DNA, followed by washing in 0.1 X SSC at about 65°C.

Q4
14 (Amended). A method for making a recombinant vector comprising inserting the isolated nucleic acid molecule of claim 1 into a vector.

Q5
18 (Amended). A recombinant method for producing a β-galactosidase II polypeptide, comprising culturing the recombinant host cell of claim 17 under conditions such that said polypeptide is expressed and recovering said polypeptide.

Q6
22 (Amended). An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the tomato β -galactosidase II polypeptide having the complete amino acid sequence of SEQ ID NO: 11 and designated TBG4 and encoded by the cDNA sequence contained in Gen Bank Accession No. AF020390;

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Cont. (b) a nucleotide sequence encoding the mature tomato β -galactosidase II polypeptide having the amino acid sequence from about position 24 to about position 724 of the sequence of SEQ ID NO: 11 and designated TBG4 and encoded by the cDNA sequence contained in Gen Bank Accession No. AF020390; and

(c) a nucleotide sequence fully complementary to either of the nucleotide sequences in (a) or (b), above.

97 26 (Amended). The nucleic acid molecule of claim 22 wherein said polynucleotide has the complete nucleotide sequence of the cDNA sequence contained in Gen Bank Accession No. AF020390.

Cancel claim ~~13~~.

Please enter the Abstract of the Invention enclosed herewith as a separate page.

Claims 1, 2, 22 and 26 were amended in order to delete nonelected inventions, as required. Claims 1-4, 8, 12, 22 and 26

were amended in order to more clearly define the invention: The β -galactosidase II polypeptide is now identified as a tomato β -galactosidase. Support for the amendment may be found throughout the specification. The Gen Bank accession was amended to recite a sequence since the Gen Bank Accession No. refers to a nucleotide sequence. The amino acid positions of the mature polypeptide were amended to more clearly identify the metes and bounds of the polypeptide, as required. Support for the language of the amendment may be found in claim 4. Reference to Figs. 2 and 3 were eliminated from the claims as suggested since the SEQ ID NO. is believed to sufficiently identify the intended nucleotide sequences claimed. "Stringent hybridization conditions" are now provided in claim 12, as required. Support for the amendment may be found on pages 19-20 of the specification. The remaining amendments are editorial in nature and/or are made at the suggestion of the Examiner. It is respectfully submitted that these amendments are made to correct matters of form and typographical errors and therefore do not constitute new matter and thus do not affect the merits of the application.

A version with markings to show changes made is attached hereto.

OBJECTIONS AND REJECTIONS

1. The drawings are objected to by the Draftsperson for various informalities.
2. The specification is objected to as not containing an Abstract of the Invention.
3. Claims 1, 2, 22 and 26 are objected to because they recite the sequences of nonelected inventions.
4. Claim 18 is objected for omitting an article before " β -galactosidase".
5. Claims 1-4, 8, 12-18, 22 and 26 are rejected under 35 § USC 112, first paragraph, as for lack of enablement.
6. Claims 1-4, 8, 12-13, 22 and 26 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.
7. Claims 1, 12-18 and 22 are rejected under 35 USC § 102(b) as being anticipated by Ross et al. (hereinafter "Ross").
8. Claims 1-4, 8, 12-18, 22 and 26 are rejected under 35 USC § 101 for lack of utility.
9. Claims 1-4, 8, 12-18, 22 and 26 are rejected under 35 USC § 112, first paragraph, because, since the claimed invention is not